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6008-180
D205-596-107
Job Sheet 170725
170725/5033649

Part No: D205-596-107

Job Qty: 1 ea

Part Name: Aft Crosstube - Extended Height 31"

Part Weight: 0 lbs

Job Created: 1/18/18

Due Date: 1/26/18

Type: SOLD

Status: Scheduled

Priority: Medium

Job Tracking No:

Created By: Mario Poulin

Description:

Note: URF14-644 DWG REV B-3(DEO) U/R IPP Rev:D 05.03.21 Added bending procedure KJ/JLM IPP Rev:E 08-01-10 ECN 1075 DD IPP Rev F 08.04.28 Added bending & mat'l EC verified by: DD IPP REV:G 13.11.29 as per dwg DEO B-2 DD VERF:JLM IPP REV:H 15.01.28 as per dwg DEO B-3/CHG004 DD VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard			Workcenter/Supplier			Sign-off
					Setup hrs	Run hrs		Workcenter / Supplier	Lead Time		
90	Start up Operation	1 Ea	1/25/18	1/25/18	0.00	0.00		Start Up Crosstubes-1			DP2
105	HandFXtube	1 pcs	1/25/18	1/25/18	0.00	0.47		HandFinish5			2018/01/19
107	QC	1 pcs	1/25/18	1/25/18	0.00	0.00		QC7-1			DP2
110	CNC Bend Crosstubes	1 pcs	1/25/18	1/25/18	2.56	0.00		CNC Bend Crosstube			DAS B GP
130	QC	1 pcs	1/25/18	1/25/18	0.00	0.00		QC15			47
140	Crosstubes	1 pcs	1/25/18	1/25/18	0.00	2.32		Crosstubes-1			9-89 DP2
150	HandFXtube	1 pcs	1/25/18	1/25/18	0.00	0.47		Crosstubes-3			DAS DP2
160	QC	1 pcs	1/25/18	1/25/18	0.00	0.00		QC5			38 DAS
170	QC	1 pcs	1/25/18	1/25/18	0.00	0.00		QC7-1			9-89 38
180	SprayPaint	1 pcs	1/25/18	1/25/18	0.00	2.68		Spray Paint			9-89 38
190	QC	1 pcs	1/25/18	1/25/18	0.00	0.00		QC14			38
200	Crosstubes	1 pcs	1/26/18	1/26/18	0.00	2.32		Crosstubes-1			✓ AB JAN 27 2018
210	QC	1 pcs	1/26/18	1/26/18	0.00	0.00		QC5			38
215	DC	1 pcs	1/26/18	1/26/18	0.00	0.00		DC			9-89
220	Packaging	1 pcs	1/26/18	1/26/18	0.00	0.00		Packaging3-1			9-89
230	QC21-FG	1 Ea	1/26/18	1/26/18	0.00	0.00		QC21			9-89

Part Op 105 - INSIDE AND OUT

Descriptions: 110 - 1- Bend as per Dwg D2890 using CNC bender program D2890 2- Mark cut lines as per dwg D205-596-107
140 - 1-Cut as per dimension sheet 2-Deburr & Inspect for surface damage. Polish cut surface. Scribe part # and batch # on one end of tube.

150 - ***IMMEDIATELY AFTER GRINDING***

180 - 1-Prime inside and outside per QSI 005 4.2 Prime 138646 Paint 138686

200 - 1- Lightly scuff the bonded area using a 180 grit sand paper and clean the area with 41058 wash 'n' wipe 2- Apply Proseal as per dwg D205-596-107 (DEO). 138708 5/18

210 - ***PRIOR TO PACKAGING RECHECK TORQUE ON CLAMPS AFTER PROSEAL HAS CURED 72HOURS.***

215 - Photocopy D205-594 bluefile & type labels per PPP D205-596-107 CHG003

220 - Identify and pack for shipping as per PPP D205-596-107

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D6008-180	Crosstube Extrusion	1 Ea (1 ea)	110-CNC Bend Crosstubes	
D2940-1	Support	2 Ea (2 ea)	200-Crosstubes	
D3595-063-530	Rubber Cushion 0.63" Wide X 5.30" Long	500 Ea (4 ea)	200-Crosstubes	

MS21920-28

M137963-168

(4)

Plax 1/18/18 3:48 PM dart.poulin.mario

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev I

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

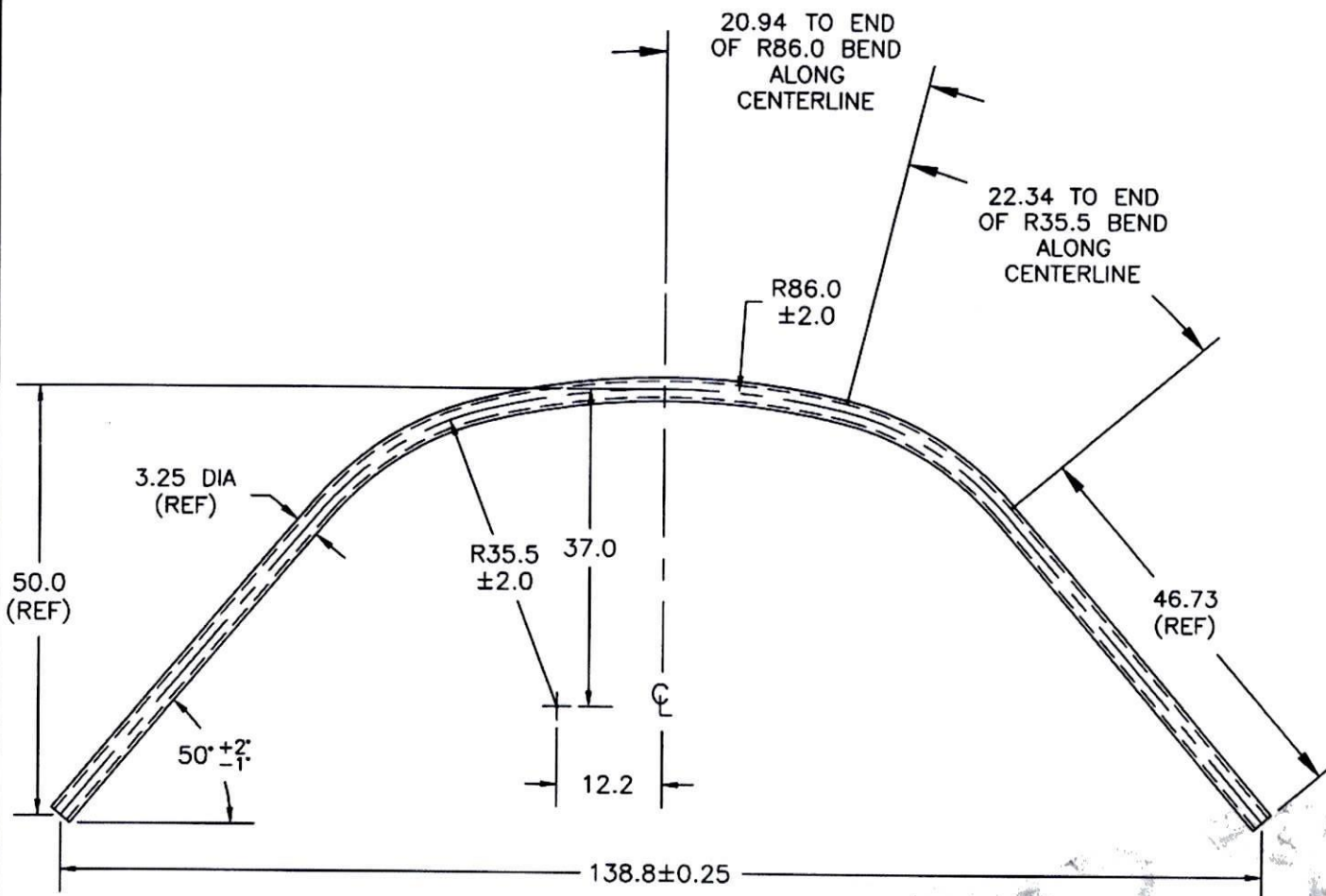
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

DART**RELEASED**
02.10.28

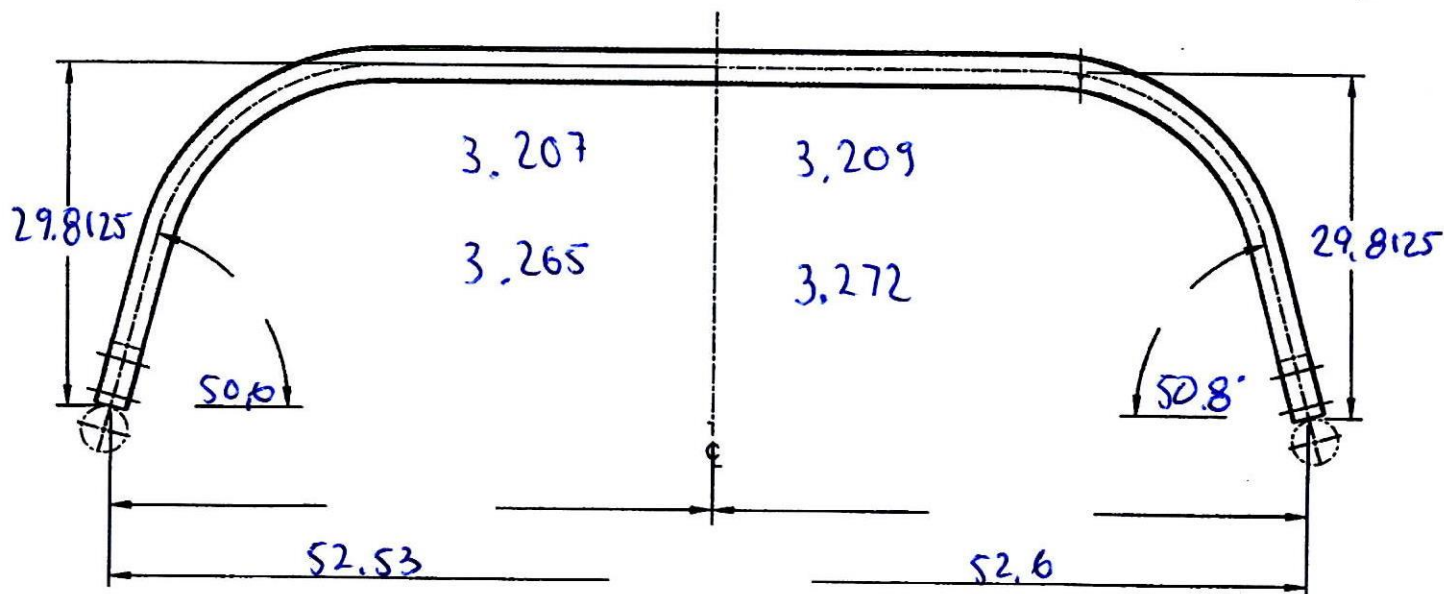
DESIGN	DRAWN BY	DART AEROSPACE LTD
CHECKED	APPROVED	HAWKESBURY, ONTARIO, CANADA
DATE	DRAWING NO.	REV. B
02.10.18	D2890	SHEET 1 OF 1
	TITLE	SCALE
A	AFT CROSS TUBE	1:20
B	NEW ISSUE	
	ADD TANGENT LENGTHS; CHANGE NOTES	

**NOTES**

- 1) MATERIAL: MANUFACTURE FROM D6008-180 (Ø3.25 OD x 0.438 WALL)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) PART IS SYMMETRIC ABOUT CENTERLINE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) BEND PROGRESSIVELY WITH MINIMUM OF 3 PASSES
- 6) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.

DART AEROSPACE LTD		Work Order:	
Description: Crosstube High-High Aft		Part Number:	D205-596-107
Inspection Dwg: D205-596-107 Rev: B		Page 1 of 1	

Required Dimension	Min	Max
Height	29.7	29.9
1/2 Span	52.4	52.6
Angle	49	52
Total Span	104.8	105.2
Bending Passes	3	--
Crushing	--	6%



	Side A	Side B
Bending Passes	14	14
Crushing	0.9%	1%
Comments		

QC15 Inspection	DAS 47 9-89
Date	18-01-25

Rev	Date	Change	Revised by	Approved
A	07.02.06	New Issue	KJ/JM	
B	08.04.21	Dwg Rev updated	KJ/JM	
C	12.04.16	Added bending, crushing dimensions	KJ	